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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/990,204	KUWABARA ET AL.	
	Examiner	Art Unit	
	Andrew C. Lee	2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 October 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *10-12 and 17-33* is/are pending in the application.

4a) Of the above claim(s) *1-9,13-16* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10-12 and 17-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Claims 10 – 12, 17 – 33 are pending.

Claims 21 – 33 are newly added.

Claims 1 – 9, 13 – 16 were canceled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 10, 11, 12, 17, 18, 19, 20, 27 – 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersson et al. (US 7023846 B1) in view of Hariguchi et al. (US 6956858 B2).

Regarding claim 10, Andersson et al. disclose a method of configuring a networking device ("label switching router" interpreted as a networking device; col. 3, lines 65 – 67, col. 4, lines 1 – 4), comprising: generating a first forwarding table ("element 240 incoming forwarding table and based upon the network layer addressing information in the packet, and adds the new label to its incoming forwarding table" interpreted as generating a first forwarding table; Fig. 2, col. 2, lines 31 – 36, col. 6, lines 59 – 67, col. 7, lines 1 – 2); generating a second forwarding table ("element 260 outgoing forwarding table, and allocates a new label, and adds the new label to its outgoing forwarding table" correlates to generating a second forwarding table; Fig. 2,

col. 2, lines 31 – 36, col. 5, lines 22 – 27); Andersson et al. also imply or suggest programming a filter to perform a lookup operation in the first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions ("incoming packet processing logic and label detection logic" correlates to programming a filter to perform a lookup operation in the first forwarding table; col. 1, lines 56 – 66, col. 4, lines 43 – 56, col. 10, lines 22 – 49; Fig. 2, Fig. 11); programming the filter to initiate a lookup operation in the second forwarding table if the first field value does not meet one or more conditions of the first set of conditions (col. 4, lines 56 – 65).

Andersson et al. do not explicitly teach programming a filter to perform a lookup operation in the first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions; programming the filter to initiate a lookup operation in the second forwarding table if the first field value does not meet one or more conditions of the first set of conditions.

Hariguchi et al. in the same field of endeavor teach programming a filter to perform a lookup operation in the first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions ("the route engine may access any level of table array by using a next level route pointer stored in the routing field", "when a packet is being routed, the router searches the first table, rt_host, for host routes,... the first table, rt_host, routers use the entire destination IP host address in the incoming packet as a hash key to determine a starting pointer .." interpreted as programming a filter to perform a lookup operation in the first forwarding table; Abstract, col. 2, lines 16 – 22, lines 38 – 44, Fig. 3, col. 5, lines 43 – 54); programming the filter to initiate a lookup operation in the second forwarding

table if the first field value does not meet one or more conditions of the first set of conditions ("the route engine may access any level of table array by using a next level route pointer stored in the routing field", "when the search of the first table fails to find a host route, the router searches the second table, rt_net, to determine a network route ....." interpreted as to initiate a lookup operation in the second forwarding table if the first field value does not meet one or more conditions of the first set of conditions; Abstract, col. 2, lines 24 – 35, lines 45 – 57, Fig. 36, col. 5, lines 43 – 54).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Andersson et al. to include the features of programming a filter to perform a lookup operation in the first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions; programming the filter to initiate a lookup operation in the second forwarding table if the first field value does not meet one or more conditions of the first set of conditions as taught by Hariguchi et al. in order to provide packet routing technology in a networked environment such as the Internet, and particularly to packet routing using multi-array routing tables (as suggested by Hariguchi et al., col. 1, lines 9 – 12).

Regarding claim 11, Andersson et al. disclose the method of claimed wherein the step of generating a first forwarding table comprises the substep of generating a first forwarding table containing an entry corresponding to a first label switched path (col. 4, lines 50 – 60; col. 6, lines 61 – 67, col. 7, lines 1 – 2; Fig. 2, Fig. 3A, referenced the packet includes label switching information that is associated with an LSP mapped in the incoming forwarding table).

Regarding claim 12, Andersson et al. disclose the method of claimed wherein the step of generating a second forwarding table comprises the substep of generating a second forwarding table (col. 4, lines 60 – 65, col. 5, lines 22 – 27; Fig. 2, Fig. 3B, referenced determines whether the packet is associated with an LSP mapped in the outgoing forwarding table).

Regarding claim 17, Andersson et al. disclose a networking device ("label switching router" as networking device; col. 3, lines 65 – 67, col. 4, lines 1 – 4); a memory for storing a first forwarding table and a second forwarding table (col. 2, lines 31 – 36, col. 12, lines 1 – 8; Fig. 2, element 240 incoming forwarding table as first forwarding table, element 260 outgoing forwarding table as second forwarding table); Andersson et al. also imply or suggests a filter programmed to initiate a lookup operation in the first forwarding table if a first field value of a header contained in a received packet meets a first set of conditions ("incoming packet processing logic and label detection logic" interpreted as programming a filter to perform a lookup operation in the first forwarding table; col. 4, lines 43 – 56, col. 10, lines 22 – 49; Fig. 11) and to initiate a lookup operation in the second forwarding table if the first field value does not meet one or more conditions of the first set of conditions (col. 4, lines 56 – 65).

Andersson et al. do not explicitly teach a filter programmed to initiate a lookup operation in the first forwarding table if a first field value of a header contained in a received packet meets a first set of conditions and to initiate a lookup operation in the second forwarding table if the first field value does not meet one or more conditions of the first set of conditions.

Hariguchi et al. in the same field of endeavor teache a filter programmed to initiate a lookup operation in the first forwarding table if a first field value of a header contained in a received packet meets a first set of conditions ("the route engine may access any level of table array by using a next level route pointer stored in the routing field", "when a packet is being routed, the router searches the first table, rt_host, for host routes,... the first table, rt_host, routers use the entire destination IP host address in the incoming packet as a hash key to determine a starting pointer .." interpreted to initiate a lookup operation in the first forwarding table if a first field value of a header contained in a received packet meets a first set of conditions; Abstract, col. 2, lines 16 – 22, lines 38 – 44, Fig. 3, col. 5, lines 43 – 54); to initiate a lookup operation in the second forwarding table if the first field value does not meet one or more conditions of the first set of conditions (when the search of the first table fails to find a host route, the router searches the second table, rt_net, to determine a network route ....." interpreted as to initiate a lookup operation in the second forwarding table if the first field value does not meet one or more conditions of the first set of conditions; col. 2, lines 24 – 35, lines 45 – 57, Fig. 36, col. 5, lines 43 – 54).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Andersson et al. to include the features of a filter programmed to initiate a lookup operation in the first forwarding table if a first field value of a header contained in a received packet meets a first set of conditions and to initiate a lookup operation in the second forwarding table if the first field value does not meet one or more conditions of the first set of conditions as taught by Hariguchi et al. in order to provide packet routing technology in a networked environment such as

the Internet, and particularly to packet routing using multi-array routing tables (as suggested by Hariguchi et al., col. 1, lines 9 – 12).

Regarding claim 18, Andersson et al. disclose the networking device of claimed wherein the first forwarding table contains an entry corresponding to a first label switched path ("the logic set up the LSP by adding the new label to the incoming forwarding table"; col. 7, lines 10 – 17).

Regarding claim 19, Andersson et al. disclose the networking device of claimed wherein the second forwarding table contains an entry corresponding to a second label switched path ("the logic allocates a new label for the new LSP, and sets up the new LSP by adding the new label to the outgoing forwarding table; col. 5, lines 32 – 42; Fig. 2, Fig. 3A).

Regarding claim 20, Andersson et al. disclose the networking device ("label switching router" as networking device; col. 3, lines 65 – 67, col. 4, lines 1 – 4); Andersson et al. also disclose ingress interface for receiving packet ("element 210 incoming interface" as ingress interface; col. 4, lines 43 – 44; Fig 2); egress interface for transmitting packet ("element 230, outgoing interface" as egress interface; col. 4, lines 47 – 48); wherein each of the lookup operations results in an identification of an egress interface from which the received packet is to be transmitted (col. 4, lines 47 – 65).

Andersson et al. teach ingress interface and egress interface ("incoming interface and outgoing interface; Fig. 2), but do not teach explicitly a plurality of ingress interfaces for receiving packets; a plurality of egress of egress interfaces for transmitting packets.

Hariguchi et al. in the same field of endeavor teach a plurality of ingress interfaces for receiving packets ("one or more input ports for receiving a message"

interpreted as a plurality of ingress interfaces for receiving packets; Fig. 3, col. 5, lines 39 – 42); a plurality of egress interfaces for transmitting packets ("output ports for transmitting the message" interpreted as a plurality of egress interfaces for transmitting packets; Fig. 3, col. 5, lines 39 – 42).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Andersson et al. to include the features of a plurality of ingress interfaces for receiving packets; a plurality of egress interfaces for transmitting packets as taught by Hariguchi et al. in order to provide packet routing technology in a networked environment such as the Internet, and particularly to packet routing using multi-array routing tables (as suggested by Hariguchi et al., col. 1, lines 9 – 12).

Regarding claim 27, Andersson et al. disclose a method of configuring a networking device ("label switching router" interpreted as a networking device; col. 3, lines 65 – 67, col. 4, lines 1 – 4), comprising: generating a first forwarding table ("element 240 incoming forwarding table and based upon the network layer addressing information in the packet, and adds the new label to its incoming forwarding table" interpreted as generating a first forwarding table; Fig. 2, col. 2, lines 31 – 36, col. 6, lines 59 – 67, col. 7, lines 1 – 2) except including information identifying a first plurality of egress interface ports; generating a second forwarding table ("element 260 outgoing forwarding table, and allocates a new label, and adds the new label to its outgoing forwarding table" correlates to generating a second forwarding table; Fig. 2, col. 2, lines 31 – 36, col. 5, lines 22 – 27) except including information identifying a second plurality of egress interface ports; Andersson et al. also suggest implicitly programming a filter to

initiate a lookup operation in the first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions ("incoming packet processing logic and label detection logic" correlates to programming a filter to perform a lookup operation in the first forwarding table; col. 1, lines 56 – 66, col. 4, lines 43 – 56, col. 10, lines 22 – 49; Fig. 2, Fig. 11); programming the filter to initiate a lookup operation in the second forwarding table if a first field value meets one or more conditions of a second set of conditions (col. 4, lines 56 – 65).

However, Andersson et al. do not disclose explicitly including information identifying a first plurality of egress interface ports, including information identifying a second plurality of egress interface ports, and programming a filter to initiate a lookup operation in the first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions; programming the filter to initiate a lookup operation in the second forwarding table if a first field value meets one or more conditions of a second set of conditions.

Hariguchi et al. in the same field of endeavor teach including information identifying a first plurality of egress interface ports ("output ports for transmitting the message"; Fig. 3, col. 5, lines 39 – 42), including information identifying a second plurality of egress interface ports ("output ports for transmitting the message"; Fig. 3, col. 5, lines 39 – 42), and programming a filter to initiate a lookup operation in the first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions conditions ("the route engine may access any level of table array by using a next level route pointer stored in the routing field", "when a packet is being routed, the router searches the first table, rt_host, for host routes,… the first table,

rt_host, routers use the entire destination IP host address in the incoming packet as a hash key to determine a starting pointer .." interpreted as programming a filter to perform a lookup operation in the first forwarding table; Abstract, col. 2, lines 16 – 22, lines 38 – 44, Fig. 3, col. 5, lines 43 – 54); programming the filter to initiate a lookup operation in the second forwarding table if a first field value meets one or more conditions of a second set of conditions ("the route engine may access any level of table array by using a next level route pointer stored in the routing field", "when the search of the first table fails to find a host route, the router searches the second table, rt_net, to determine a network route ….." interpreted as to initiate a lookup operation in the second forwarding table if the first field value does not meet one or more conditions of the first set of conditions; Abstract, col. 2, lines 24 – 35, lines 45 – 57, Fig. 36, col. 5, lines 43 – 54).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Andersson et al. to include the features of including information identifying a first plurality of egress interface ports, including information identifying a second plurality of egress interface ports, and programming a filter to initiate a lookup operation in the first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions; programming the filter to initiate a lookup operation in the second forwarding table if a first field value meets one or more conditions of a second set of conditions as taught by Hariguchi et al. in order to provide packet routing technology in a networked environment such as the Internet, and particularly to packet routing using multi-array routing tables (as suggested by Hariguchi et al., col. 1, lines 9 – 12).

Regarding claim 28, Andersson et al. disclose the method claimed where generating a first forwarding table comprises generating a first forwarding table containing an entry corresponding to a first label switched path (Fig. 3A, col. 5, lines 63 – 67, col. 6, lines 1 – 5; Fig. 4, col. 7, lines 6 – 34).

Regarding claim 29, Andersson et al. disclose 29 the method claimed where generating a second forwarding table comprises generating a second forwarding table containing an entry corresponding to a second label switched path (Fig. 3B, col. 6, lines 35 – 41, Fig. 4, col. 7, lines 6 – 34).

Regarding claim 30, Andersson et al. disclose a networking device ("label switching router" interpreted as a networking device; col. 3, lines 65 – 67, col. 4, lines 1 – 4) comprising: a memory ("tangible storage medium"; col. 12, lines 1 – 8, 30 – 47) for storing a first forwarding table and a second forwarding table (Fig. 2, col. 2, lines 31 – 36, col. 6, lines 59 – 67, col. 7, lines 1 – 2, ; Fig. 2, col. 2, lines 31 – 36, col. 5, lines 22 – 27), except the first forwarding table and the second forwarding table including information identifying a plurality of egress interfaces; and Andersson et al. suggest implicitly a filter programmed to initiate a lookup operation in the first forwarding table if a first field value of a header contained in a received packet meets one or more conditions of a first set of conditions ("incoming packet processing logic and label detection logic" correlates to programming a filter to perform a lookup operation in the first forwarding table; col. 1, lines 56 – 66, col. 4, lines 43 – 56, col. 10, lines 22 – 49; Fig. 2, Fig. 11)and to initiate a lookup operation in the second forwarding table if the first field value meets one or more conditions of a second set of conditions (col. 4, lines 56 – 65).

However, Andersson et al. do not disclose explicitly the first forwarding table and the second forwarding table including information identifying a plurality of egress interfaces; and a filter programmed to initiate a lookup operation in the first forwarding table if a first field value of a header contained in a received packet meets one or more conditions of a first set of conditions and to initiate a lookup operation in the second forwarding table if the first field value meets one or more conditions of a second set of conditions.

Hariguchi et al. in the same field of endeavor teach the first forwarding table and the second forwarding table including information identifying a plurality of egress interfaces ("output ports for transmitting the message"; Fig. 3, col. 5, lines 39 – 42), including information identifying a second plurality of egress interface ports ("output ports for transmitting the message"; Fig. 3, col. 5, lines 39 – 42), and a filter programmed to initiate a lookup operation in the first forwarding table if a first field value of a header contained in a received packet meets one or more conditions of a first set of conditions ("the route engine may access any level of table array by using a next level route pointer stored in the routing field", "when a packet is being routed, the router searches the first table, rt_host, for host routes,… the first table, rt_host, routers use the entire destination IP host address in the incoming packet as a hash key to determine a starting pointer .."; Abstract, col. 2, lines 16 – 22, lines 38 – 44, Fig. 3, col. 5, lines 43 – 54); to initiate a lookup operation in the second forwarding table if the first field value meets one or more conditions of a second set of conditions ("the route engine may access any level of table array by using a next level route pointer stored in the routing field", "when the search of the first table fails to find a host route, the router searches the

second table, rt_net, to determine a network route; Abstract, col. 2, lines 24 – 35, lines 45 – 57, Fig. 36, col. 5, lines 43 – 54).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Andersson et al. to include the features of the first forwarding table and the second forwarding table including information identifying a plurality of egress interfaces; and a filter programmed to initiate a lookup operation in the first forwarding table if a first field value of a header contained in a received packet meets one or more conditions of a first set of conditions and to initiate a lookup operation in the second forwarding table if the first field value meets one or more conditions of a second set of conditions as taught by Hariguchi et al. in order to provide packet routing technology in a networked environment such as the Internet, and particularly to packet routing using multi-array routing tables (as suggested by Hariguchi et al., col. 1, lines 9 – 12).

Regarding claim 31, Andersson et al. disclose the networking device claimed where the first forwarding table contains an entry corresponding to a first label switched path (Fig. 3A, col. 5, lines 63 – 67, col. 6, lines 1 – 5; Fig. 4, col. 7, lines 6 – 34).

Regarding claim 32, Andersson et al. disclose 32. (new) The networking device of claim 31, where the second forwarding table contains an entry corresponding to a second label switched path (Fig. 3B, col. 6, lines 35 – 41, Fig. 4, col. 7, lines 6 – 34).

Regarding claim 33, although Andersson et al. disclose the networking device claimed ingress interface and egress interface (Fig.2), Andersson et al. do not disclose explicitly a plurality of ingress interfaces for receiving packets; the plurality of egress

interfaces for transmitting packets, wherein each of the lookup operations results in an identification of an egress interface from which the received packet is to be transmitted.

Hariguchi et al. in the same field of endeavor teach a plurality of ingress interfaces for receiving packets; the plurality of egress interfaces for transmitting packets, wherein each of the lookup operations results in an identification of an egress interface from which the received packet is to be transmitted ("one or more input ports for receiving a message"; Fig. 3, col. 5, lines 39 – 42, "output ports for transmitting the message"; Fig. 3, col. 5, lines 39 – 42).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Andersson et al. to include the features of a plurality of ingress interfaces for receiving packets; the plurality of egress interfaces for transmitting packets, wherein each of the lookup operations results in an identification of an egress interface from which the received packet is to be transmitted as taught by Hariguchi et al. in order to provide packet routing technology in a networked environment such as the Internet, and particularly to packet routing using multi-array routing tables (as suggested by Hariguchi et al., col. 1, lines 9 – 12).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section

> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 21 – 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Aggarwal et al. (US 6330614 B1).

Regarding claim 21, Aggarwal et al. disclose in a router containing a plurality of forwarding tables (elements 1, 2, 3, 4, Fig. 4), a method of packet forwarding, comprising: receiving a packet at an ingress interface ("gets a data gram from a directly connected interface" interpreted as receiving a packet at an ingress interface; col. 4, lines 63 – 67); classifying the received packet based on at least a first field value contained in the header of the packet ("examining the destination network address in the header"; col. 5, lines 1 - 8); associating one of the plurality of forwarding tables to the packet according to its classification ("examining the datagram header and looking up the Forwarding Table to find"; col. 5, lines 1 – 8); performing a lookup operation in the associated forwarding table according to at least a second field value contained in the header of the packet (col. 6, lines 49 – 55); determining an egress interface based on the lookup operation (col. 6, lines 52 – 55); and transmitting the received packet from the determined egress interface ("to find the next interface to which to send the datagram"; col. 5, lines 1 – 8, col. 6, lines 52 – 55).

Regarding claim 22, Aggarwal et al. disclose the method claimed where the classifying comprises determining whether the first field value meets one or more criteria ("verifies the integrity of the incoming datagram header"; Fig. 1, col. 6, lines 49 – 55).

Regarding claim 23, Aggarwal et al. disclose the method claimed where the classifying further comprises assigning a default classification if none of the criteria are met (col. 6, lines 11 – 25).

Regarding claim 24, Aggarwal et al. disclose the method claimed where a first forwarding table contains an entry corresponding to a first label switched path ("MPLS"; Fig. 4, col. 8, lines 19 – 51, Fig. 5, col. 12, lines 13 – 23).

Regarding claim 25, Aggarwal et al. disclose the method claimed where the first forwarding table contains an entry corresponding to a second label switched path ("MPLS"; Fig. 4, col. 8, lines 19 – 51, Fig. 5, col. 12, lines 13 – 23).

Regarding claim 26, Aggarwal et al. disclose in a networking device, a method of forwarding packets ("exchanging information…"; col. 2, lines 27 – 42), comprising: classifying a received packet based on information contained in the packet ("examining the destination network address in the header"; col. 5, lines 1 - 8); selecting one of a plurality of forwarding tables based on the classification of the received packet ("examining the datagram header and looking up the Forwarding Table to find"; col. 5, lines 1 – 8); performing a lookup operation using the selected forwarding table (col. 6, lines 49 – 55); and determining an egress interface for the packet based on the performed lookup operation ("to find the next interface to which to send the datagram"; col. 5, lines 1 – 8, col. 6, lines 52 – 55).

Response to Arguments

6. Applicant's arguments filed on 10/20/2008 with respect to claims 10, 11, 12, 17, 18, 19, 20, 21 – 33 have been considered but are moot in view of the new ground(s) of rejection.

Regarding claim 10, applicant argues references Andersson et al. and Hariguchi et al. do not disclose or suggest programming a filter to perform a lookup operation in a first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions and programming the filter to initiate a lookup operation in a second forwarding table if the first field value does not meet one or more conditions of the first set of conditions, as recited in claim 10. (see applicant's remark dated 10/20/2008, page 9). Examiner respectfully disagrees.

Examiner contends the combined system of references Andersson et al. and Hariguchi et al. teach programming a filter to perform a lookup operation in a first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions and programming the filter to initiate a lookup operation in a second forwarding table if the first field value does not meet one or more conditions of the first set of conditions.

Examiner interpreted implicitly claimed subject matter programming a filter to perform a lookup operation in the first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions "incoming packet processing logic and label detection logic", see Andersson et al. col. 1, lines 56 – 66, col. 4, lines 43 – 56, col. 10, lines 22 – 49; Fig. 2, Fig. 11); and programming the filter to initiate a lookup operation in the second forwarding table if the first field value does not meet one or more conditions of the first set of conditions as otherwise the incoming

packet processing logic forwards the packet based upon the network layer addressing information…." see Andersson et al. col. 4, lines 56 – 65.

Examiner further interpreted claimed subject matter "programming a filter to initiate a lookup operation in the first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions" as "the route engine may access any level of table array by using a next level route pointer stored in the routing field", "when a packet is being routed, the router searches the first table, rt_host, for host routes,… the first table, rt_host, routers use the entire destination IP host address in the incoming packet as a hash key to determine a starting pointer .." see HARIGUCHI et al; Abstract, col. 2, lines 16 – 22, lines 38 – 44, Fig. 3, col. 5, lines 43 – 54; and "programming the filter to initiate a lookup operation in the second forwarding table if a first field value meets one or more conditions of a second set of conditions" as "the route engine may access any level of table array by using a next level route pointer stored in the routing field", "when the search of the first table fails to find a host route, the router searches the second table, rt_net, to determine a network route; see HARIGUCHI et al Abstract, col. 2, lines 24 – 35, lines 45 – 57, Fig. 36, col. 5, lines 43 – 54).

Hence the combined system of references Andersson et al. and Hariguchi et al. teach programming a filter to perform a lookup operation in a first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions and programming the filter to initiate a lookup operation in a second forwarding table if the first field value does not meet one or more conditions of the first set of conditions

Applicant then argues reference Hariguchi et al. do not disclose that the routing table is used to search for a route when a first value of a received packet meets one or more conditions of a first set of conditions.

Examiner respectfully disagrees.

Examiner contends reference Hariguchi et al. teach the claimed subject matter the routing table is used to search for a route when a first value of a received packet meets one or more conditions of a first set of conditions.

Examiner interpreted “the routing table is used to search for a route when a first value of a received packet meets one or more conditions of a first set of conditions” as the route engine may access any level of table array by using a next level route pointer stored in the routing field", “when a packet is being routed, the router searches the first table, rt_host, for host routes,… the first table, rt_host, routers use the entire destination IP host address in the incoming packet as a hash key to determine a starting pointer ..”; see Hariguchi et al., Abstract, col. 2, lines 16 – 22, lines 38 – 44, Fig. 3, col. 5, lines 43 – 54.

Regarding claim 17, Applicant argues Independent claim 17 recites features similar to (yet possibly of different scope than) features described above with respect to claim 10. Therefore, Applicants submit that claim 17 is patentable over ANDERSSON et al. and HARIGUCHI et al., whether taken alone or in any reasonable combination, for at least reasons similar to reasons given above with respect to claim 10.

Examiner respectfully disagrees.

Examiner contends the combined system of references Andersson et al. and Hariguchi et al. teach the claimed subject matters as addressed in claim 10, see discussion as addressed above.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Carpini et al. (US 7126907 B2).
- Hama (US 7072346 B2).
- Jagannath et al. (US 7095740 B1).
- Chin et al. (5617421).
- Gobuyan et al. (5917821).
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8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571)272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew C Lee/
Examiner, Art Unit 2419
<12/28/2008:2Qy09>

/Edan Orgad/
Supervisory Patent Examiner, Art Unit 2419